

Having thus described the invention, what is claimed is:

1. A valve assembly for an air brake system comprising:
a valve housing having a bore;
5 a valve member received in the bore having a first
portion and a second portion forming an interference fit with the
first portion; and
a check valve assembly interposed between the first and
second portions and maintained in an assembled state within the
10 first and second portions, the check valve assembly including a
biasing member, a follower, and a check valve member.
2. The valve assembly of claim 1 wherein the first portion
includes a recess and the second portion included protrusions
15 extending therefrom and received in a friction fit engagement
with the recess.
3. The valve assembly of claim 1 wherein the first portion
of the valve member is formed from a non-metallic material.
20
4. The valve assembly of claim 1 wherein the second
portion of the valve member is formed from a non-metallic
material.
- 25 5. The valve assembly of claim 1 wherein the first portion
of the valve member is formed from a non-metallic material and
non-circular passages are provided therethrough to enhance flow.
- 30 6. A proportioning valve assembly comprising:
a housing having a blind opening formed therein;
a valve assembly dimensioned for receipt in the
opening, the valve assembly including a first portion formed from
a non-metallic material having at least one passage extending

therethrough and having a recess formed at an open end thereof,
and a second portion formed from a non-metallic material and
including a surface dimensioned for interference fit with the
recess, and a check valve assembly received within the first and
5 second portions including a spring, a spring follower, and a
valve member disposed in abutting engagement within the first and
second portions whereby the valve assembly is maintained in
assembled arrangement by the interference fit between the first
and second portions allowing the valve assembly to be easily
10 inserted into the blind opening.

7. The assembly of claim 6 wherein the second portion
includes raised protrusions disposed in spaced relation along the
first portion for frictional engagement with the recess.

8. The assembly of claim 7 wherein the second portion
includes a circumferentially continuous shoulder dimensioned for
receipt in the recess.

9. A method of assembling a proportioning valve assembly
having a housing with a blind opening therein, comprising the
steps of:

providing a first non-metallic valve member portion
having an open end defining a recess;

providing a second non-metallic valve member portion
having a shoulder dimensioned for receipt in the recess of the
first portion;

inserting a check valve assembly between the valve
member first and second portions; and

frictionally engaging the shoulder in the recess to
encase the check valve member between the first and second valve
member portions and define a sub-assembly.

10. The method of claim 9 comprising the further step of inserting the sub-assembly into the opening in the housing.

11. The method of claim 9 including the steps of placing
5 the check valve assembly into a cavity in the second valve member portion and advancing the first and second portions toward one another prior to the frictional engagement step.

668011-0255460